



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/990,204	11/21/2001	Ken Kuwabara	JNP-0126	3547
<div>44987      7590      02/23/2007</div> <div>HARRITY SNYDER, LLP 11350 Random Hills Road SUITE 600 FAIRFAX, VA 22030</div>				
			EXAMINER	
			LEE, ANDREW CHUNG CHEUNG	
			ART UNIT	PAPER NUMBER
			2616	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/23/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

09/990,204

Applicant(s)

KUWABARA ET AL.

Examiner

Andrew C. Lee

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-12 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-12, 17-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. Claims 1 – 9, 13 – 16 canceled.

Claims 10, 11, 12, 17, 18, 19, 20 are pending.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 10, 11, 12, 17, 18, 19, 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Andersson et al. (US 7023846 B1).

Regarding claim 10, Andersson et al. disclose the limitation of a method of configuring a networking device (column 3, lines 65 – 67, column 4, lines 1 – 4; referenced "label switching router" as networking device), comprising: generating a first forwarding table (column 6, lines 59 – 67, column 7, lines 1 – 2; Fig. 2, referenced "element 240 incoming forwarding table" as first forwarding table, and based upon the network layer addressing information in the packet, and adds the new label to its incoming forwarding table); generating a second forwarding table (column 5, lines 22 –

Art Unit: 2616

27; Fig. 2, referenced "element 260 outgoing forwarding table" as a second forwarding table, and allocates a new label, and adds the new label to its outgoing forwarding table); programming a filter to perform a lookup operation in the first forwarding table if a first field value of a received packet meets one or more conditions of a first set of conditions (column 4, lines 43 – 56, column 10, lines 22 – 49; Fig. 11, referenced incoming packet processing logic and label detection logic as programming a filter to perform a lookup operation in the first forwarding table); programming the filter to initiate a lookup operation in the second forwarding table if the first field value does not meet one or more conditions of the first set of conditions (column 4, lines 60 – 65).

Regarding claim 11, Andersson et al. disclose the limitation of the method of claimed wherein the step of generating a first forwarding table comprises the substep of generating a first forwarding table containing an entry corresponding to a first label switched path (column 4, lines 50 – 60; column 6, lines 61 – 67, column 7, lines 1 – 2; Fig. 2, Fig. 3A, referenced the packet includes label switching information that is associated with an LSP mapped in the incoming forwarding table).

Regarding claim 12, Andersson et al. disclose the limitation of the method of claimed wherein the step of generating a second forwarding table comprises the substep of generating a second forwarding table (column 4, lines 60 – 65, column 5,

lines 22 – 27; Fig. 2, Fig. 3B, referenced determines whether the packet is associated with an LSP mapped in the outgoing forwarding table).

Regarding claim 17, Andersson et al. disclose the limitation of a networking device (column 3, lines 65 – 67, column 4, lines 1 – 4; referenced “label switching router” as networking device); a memory for storing a first forwarding table and a second forwarding table (column 12, lines 1 – 8; Fig. 2, element 240 incoming forwarding table as first forwarding table, element 260 outgoing forwarding table as second forwarding table); a filter programmed to initiate a lookup operation in the first forwarding table if a first field value of a header contained in a received packet meets a first set of conditions (column 4, lines 43 – 56, column 10, lines 22 – 49; Fig. 11, referenced “incoming packet processing logic and label detection logic” as programming a filter to perform a lookup operation in the first forwarding table) and to initiate a lookup operation in the second forwarding table if the first field value does not meet one or more conditions of the first set of conditions (column 4, lines 60 – 65).

Regarding claim 18, Andersson et al. disclose the limitation of the networking device of claimed wherein the first forwarding table contains an entry corresponding to a first label switched path (column 7, lines 10 – 17; referenced “the logic set up the LSP by adding the new label to the incoming forwarding table”).

Regarding claim 19, Andersson et al. disclose the limitation of the networking device of claimed wherein the second forwarding table contains an entry corresponding to a second label switched path (column 5, lines 32 – 42; Fig. 2, Fig. 3A, referenced “the logic allocates a new label for the new LSP, and sets up the new LSP by adding the new label to the outgoing forwarding table).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Andersson et al. (US 7023846 B1) in view of Aggarwal et al. (US 6330614 B1).

Regarding claim 20, Andersson et al. disclose the limitation of the networking device (column 3, lines 65 – 67, column 4, lines 1 – 4; referenced “label switching router” as networking device); Andersson et al. also disclose ingress interface for receiving packet (column 4, lines 43 – 44; Fig 2, referenced “element 210 incoming interface” as ingress interface); egress interface for transmitting packet (column 4, lines 47 – 48; referenced “element 230, outgoing interface” as egress interface); wherein each of the lookup operations results in an identification of an egress interface from which the received packet is to be transmitted (column 4, lines 47 – 65). However,

Art Unit: 2616

Andersson et al. do not disclose explicitly the limitations of a plurality of ingress interfaces for receiving packets; a plurality of egress of egress interfaces for transmitting packets. Aggarwal et al. disclose the limitations of a plurality of ingress interfaces for receiving packets (column 5, lines 54 – 57; referenced “all ingress ports” as a plurality of ingress interfaces for receiving packets; Fig. 4, elements forwarding table and header processing unit 1,2,3,4); a plurality of egress interfaces for transmitting packets (column 11, lines 37 – 37, 48 – 58; referenced “determine the corresponding appropriate output or egress interface port” as a plurality of egress interfaces for transmitting packets; Fig. 4, elements output ports 1,2,3,4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Andersson et al. to include a plurality of ingress interfaces for receiving packets; a plurality of egress of egress interfaces for transmitting packets such as that taught by Aggarwal et al. in order to provide networking systems and the forwarding and routing of information therein, being more particularly directed to the limitations of addressing space and processing speeds in the current Internet as suggested by Aggarwal et al., see column 1, lines 10 – 13.

### ***Response to Arguments***

6. Applicant's arguments filed on 11/16/2006 with respect to claims 10, 11, 12, 17, 18, 19, 20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Carpini et al. (US 7126907 B2) disclose a communication network is provided having source and destination switching routers connected by two different communication paths. A primary label switched path is established on one of the communication paths and a secondary label switched path is established on the other label switched path.
- Hama (US 7072346 B2) disclose in network for forming a VPN on a shared network and communicating via the VPN, a core network of the VPN is formed by an MPLS network, access networks for accessing the core network are formed by VLANs, and edge routers are provided between the MPLS network and VLANs for interfacing the MPLS network and the VLANs.
- So et al. (US 7012919 B1) disclose an invention is provided for affording an aggregate micro-flow having intelligent load balancing. Initially, a set of label switched paths (LSPs) is defined for a network domain.
- Jagannath et al. (US 7095740 B1) disclose a method and apparatus for directing messages through a network wherein multiple tables for directing messages through the network are maintained and provided. Each table corresponds to a virtual private network and contains routing information specific to that virtual private network. A separate routing table is maintained for each VPN.



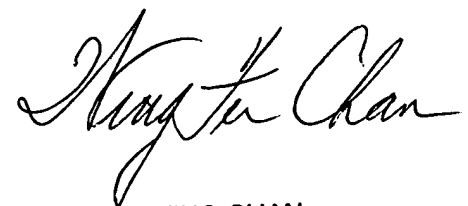
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571) 272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on (571) 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ACL/

Feb 06, 2007

A handwritten signature in black ink, appearing to read 'Wing Chan', written in a cursive style.

WING CHAN  
SUPERVISORY PATENT EXAMINER